

What is Claimed is:

1. A method of positioning a heat generating component on a header to enhance heat sinking characteristics, comprising:

5 positioning the header on a first pedestal, wherein the first pedestal and the header are bounded by an air trench having a vertical surface; and positioning the heat generating component only in areas on the header having an associated heat dissipation conical region extending from the heat generating component downward through the first pedestal at an angle that satisfies Fourier's
10 Law of Heat Conduction, wherein the conical region does not intersect the vertical surface of the air trench.

15 2. The method of claim 1, wherein the heat generating component is one from the group of a laser, a laser driver, or a cooler.

3. The method of claim 1, wherein the first pedestal includes a first material at a location adjacent to the laser and a second material at a location adjacent to the lower portion of the air trench, wherein the second material has a lower thermal conductivity than the first material.

20 4. The method of claim 1, further comprising: positioning a hybrid subassembly on a second pedestal that is separated from the first pedestal by the air trench, and mounting a laser driver on the hybrid subassembly.

5. The method of claim 4, wherein a second air trench separates the first and second pedestals from a third pedestal having an optical receiver mounted thereon.